

SHARP®

TINS-F527WJN1



**LC-32LE144E
LC-32LE244E**

SHARP®

SHARP ELECTRONICS EUROPE LTD.

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SHARP CORPORATION

<http://www.sharp-eu.com>

**LCD COLOUR TELEVISION
OPERATION MANUAL**

AQUOS



LC-32LE144E

**HD
TV**

DVB
Digital Video
Broadcasting

DivX
HD

DOLBY
DIGITAL PLUS
PULSE

HDMI

LC-32LE244E

**HD
TV
1080p**

DVB
Digital Video
Broadcasting

DivX
HD



DOLBY
DIGITAL PLUS
PULSE

HDMI

Printed in Poland
TINS-F527WJN1



SPECIAL NOTE FOR USERS IN THE U.K.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 3A fuse. Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked  or  and of the same rating as above, which is also indicated on the pin face of the plug, must be used.

Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted.

In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut off the mains plug and fit an appropriate type.

DANGER:

The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.

Under no circumstances should the cut-off plug be inserted elsewhere into a 3A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

IMPORTANT:

The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this product may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

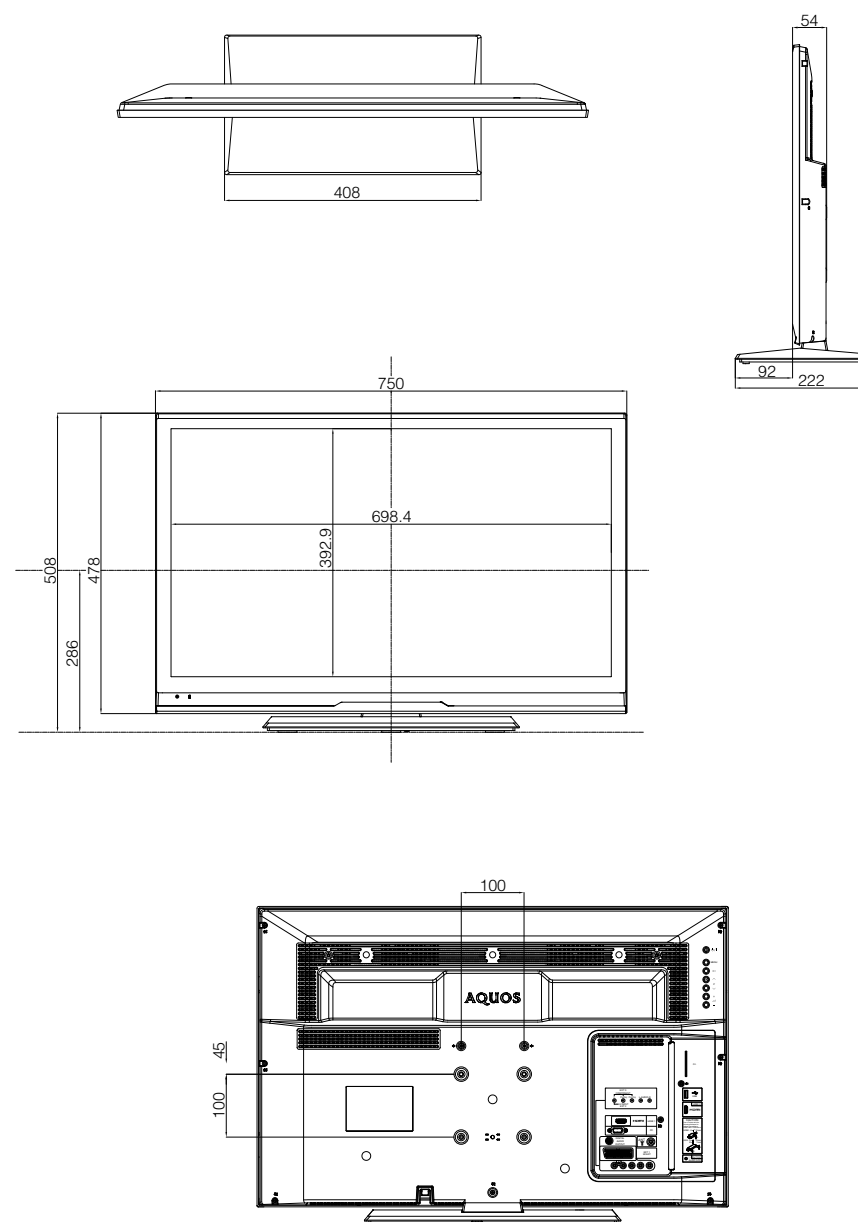
- The wire which is coloured blue must be connected to the plug terminal which is marked N or coloured black.
- The wire which is coloured brown must be connected to the plug terminal which is marked L or coloured red.

Ensure that neither the brown nor the blue wire is connected to the earth terminal in your three-pin plug.

Before replacing the plug cover make sure that:

- If the new fitted plug contains a fuse, its value is the same as that removed from the cut-off plug.
- The cord grip is clamped over the sheath of the mains lead, and not simply over the lead wires.

IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.



- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.

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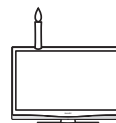
Introduction

Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the **Important Safety Precautions** carefully before using this product.

Important Safety Precautions

- **Cleaning**—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
- Use a soft damp cloth to gently wipe the panel when it is dirty. To protect the panel, do not use a chemical cloth to clean it. Chemicals may cause damage or cracks in the cabinet of the TV.
- **Water and moisture**—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.
- Do not place vases or any other water-filled containers on this product. The water may spill onto the product causing fire or electric shock.
- **Stand**—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.
- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.
- **Ventilation**—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or impact applied. If the LCD panel is broken, be careful not to be injured by broken glass.
- **Heat sources**—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).
- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.
- To prevent fire or shock hazard, do not place the AC cord under the TV set or other heavy items.
- **Headphones**—Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.
- Do not display a still picture for a long time, as this could cause an afterimage to remain.
- There is power consumption always if main plug is connected.
- **Servicing**—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified person to perform servicing.



The LCD panel is a very high technology product, giving you fine picture details.

Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red. This is within product specifications and does not constitute a fault.

Precautions when transporting the TV

When transporting the TV, never carry it by putting pressure onto the display. Be sure to always carry the TV by two people holding it with two hands—one hand on each side of the TV.

Wall mounting

Installing the LCD Colour TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.

WARNING

To prevent the spread of fire, keep candles or other open flames away from this product at all times.



Remote control unit

⏻ (POWER)

Press to turn the LCD TV on or to enter standby mode.

⏮ (INPUT SOURCE)

Press to select an input source.

0-9 DIGIT BUTTONS

Press to select a TV channel directly.

EPG (Electronic Programme Guide)

Press to display electronic programme guide when watching digital channels.

DTV/ATV

Press to switch between ATV and DTV channels.

⏮ (+/-)

Press to adjust the volume.

🔊

Press to toggle audio on and off. You can also press ⏮ (+/-) to restore the previous volume level.

🖼 (Wide mode)

Press to select picture formats.

P (^/v)

Press to select programme channel.

⏮/II

Press to select **MONO / STEREO / DUAL I / DUAL II** for ATV channel. Press to select Audio language for DTV channel.

↶ (RETURN)

Press to return to the previous "Menu" screen.

⏮ < > ⏮

Press to navigate and confirm your selection.

OK

Press to activate a setting.

MENU

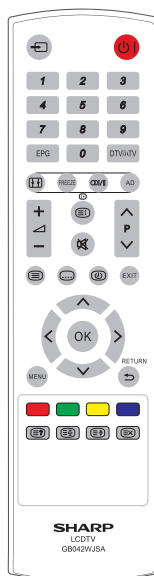
Press to activate the LCD TV OSD.

EXIT

Press to exit the LCD TV OSD or return to the previous layer.

R/G/Y/B (Colour Button)

The colour buttons function will change depending on the selected operation, see screen text for available button options.



⏮ (HOLD)

Press to stop the scrolling of pages. The text decoder stops receiving data.

🔍 (REVEAL)

Reveal hidden information such as answers to a quiz.

FREEZE

Press to freeze a moving image on the screen (only available when your input source is TV). The SCART output signal will also be frozen when you are watching digital channels.

Caution: Do not freeze the video image for long periods of time, as this may damage the LCD TV screen.

⏮

Press to cancel the teletext screen.

🕒

Press to display the Time screen.

📺 (TELETEXT)

Press to activate Teletext. Press again to activate Teletext with TV. Press again to turn off Teletext.

AD (Audio Description)

Press to switch the Audio Description On or Off.

🗣 (SUBTITLE)

For DTV, press to toggle off / between available subtitle languages.

For ATV, press to toggle off / between available subtitle pages in Teletext.

🔍 (Top/Bottom/Full)

Press to change the font size: Full screen, Top half, and Bottom half.

📺 (INDEX)

Press to return to page 100 or the index page; and then press 0 to 9. The teletext page will be numbered and added to the page you select or the secondary item.

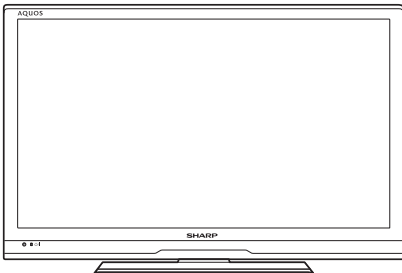
🖼

Press to display programme information, if available.

TV (Front view)



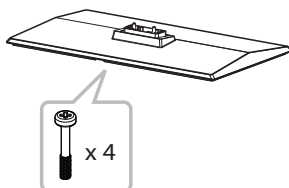
TV (Rear view)



Preparation

Supplied accessories

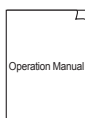
Stand unit and screws



Remote Control (x1)



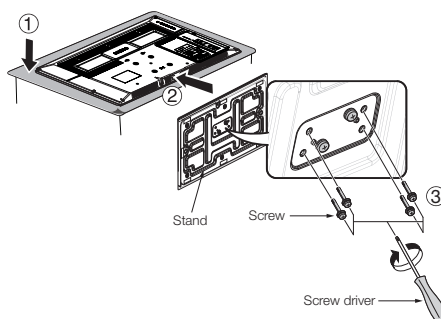
Operation Manual



R03 ("AAA" size) battery (x2)



Mount the TV base



1. Put the TV with its face down on a safe surface covered by a soft and smooth cloth.
2. Adjust the TV base to the bottom of the TV. Please be sure the arrow heads are facing front.
3. Fasten the screws by using a cross-head screwdriver (not supplied).

NOTE

- To detach the TV stand, do these steps in reverse order.

Mounting the TV on a wall

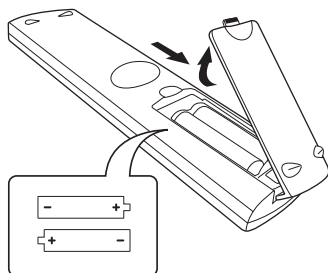
- **This TV should be mounted on a wall only with a SHARP wall mount bracket. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Mounting the LCD colour TV requires special skills and should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**
- You can ask qualified service personnel about using an optional bracket to mount the TV to a wall.
- When you mount the TV on a wall, you should attach the supporting post.
- Detach the cable tie on the rear of the TV when using the optional mount bracket.
- Optional accessory: AN-130AG1

Part name	Part number
Wall mount bracket	AN-130AG1

Preparation

Installation of batteries

1. Open the battery cover.
2. Insert two R03 ("AAA" size) batteries into remote control. Make sure the (+) and (−) ends are facing correct direction.
3. Replace the cover.



NOTE

- If you are not going to use the remote control for a long time, remove the batteries to avoid damaging remote control caused by chemical leakage.

CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below:

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.

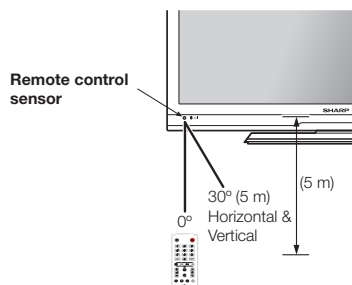
Note on disposing batteries:

The batteries provided contain no harmful materials such as cadmium, lead or mercury.

Regulations concerning used batteries stipulate that batteries may no longer be thrown out with the household rubbish. Deposit any used batteries free of charge into the designated collection containers set up at commercial businesses.

Using the remote control

Use the remote control unit by pointing it towards the remote control sensor. Objects between the remote control unit and sensor may block proper operation.



Menu Operation

1. Press **MENU** on the remote control to display the menu screen.



2. Press **<** **>** to select the desired menu (Picture, Sound, Setup, Features, Preferences), and then press **OK**.
3. Press **^** **v** **<** **>** to select / adjust the item to the desired level. Press **OK** if necessary.
4. Press **EXIT** to return to the previous layer.

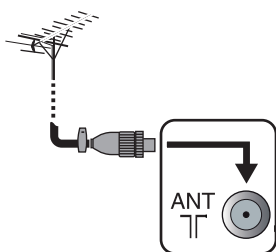
Initial installation overview

Follow these steps one by one when using the TV for the first time. Some steps may not be necessary depending on your TV installation and connection.

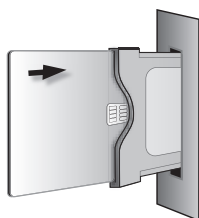
1

Preparation

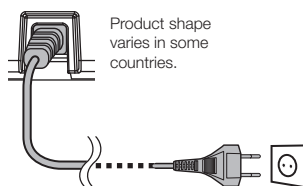
- 1 Connect antenna cable to the antenna terminal.



- 2 If necessary, insert CA module into the CI slot to watch scrambled broadcasts.



- 3 Connect the AC cord to the TV.



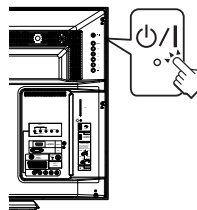
NOTE

- Place the TV close to the AC outlet, and keep the power plug within reach.

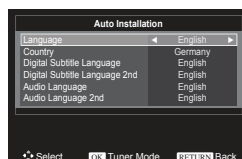
2

Power on and run the auto installation

- 1 Turn on the TV power with \odot/I .



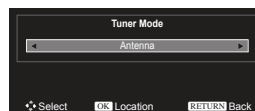
- 2 Run the initial auto installation.



1. Language setting
2. Country setting
3. Digital Subtitle Language
4. Digital Subtitle Language 2nd
5. Audio Language
6. Audio Language 2nd

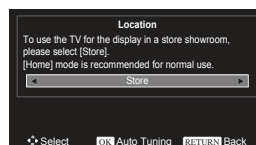
Press \wedge \vee $<$ $>$ to select the above items and set to the desired language or country, and press **OK**.

7. Tuner mode



Press $<$ $>$ to select Antenna or Cable, and press **OK**.

8. TV Location setting

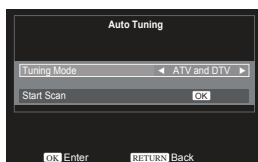


Press $<$ $>$ to select Home or Store, and press **OK**.

When Store is selected, the confirmation window appears. Press $<$ $>$ to select YES or NO, and press **OK**.

Quick guide

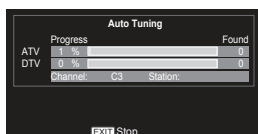
9. Tuning Mode



Press \wedge \vee to select Tuning Mode, and press \leftarrow \rightarrow to select ATV, DTV or ATV and DTV.

10. Start searching channels

Press \wedge \vee to select Start Scan, and press **OK**.



NOTE

- If you are able to receive broadcasts from more than one region or transmitter you will be prompted to choose via an OSD menu.

3

Watch TV

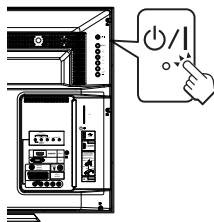
- 1 Congratulations! Now you can watch TV.
- 2 If necessary, adjust the antenna to attain maximum signal reception.

Watching TV

Daily operation


Turning on the power

Turn on the power by pressing the  button on the TV.




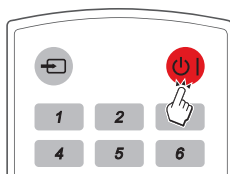
Standby mode

To standby mode


If the TV set is switched on, you can switch it to standby mode by pressing  button on the remote control.

Switching on from standby

To switch on from standby mode, press  button on the remote control.



TV indicator status

 indicator	Status
Red	Standby *
Green	Power on

* A small amount of electric power is still consumed.

NOTE

- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the power outlet.



Changing channels

Change channels by pressing **P**  .






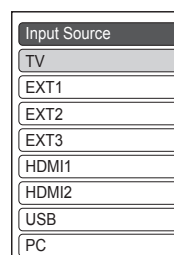
Channel List

Channel List allows you to quickly find the channel.

- Press **OK** to bring up the Channel List.
If the Favorite Control in the DTV Settings is set to On, channel list will show your favorite programs, which have been set in the Favorite Program in DTV Settings.
- Use the   button to navigate the list. Once a channel you wish to watch is highlighted, press **OK** to switch to the channel.

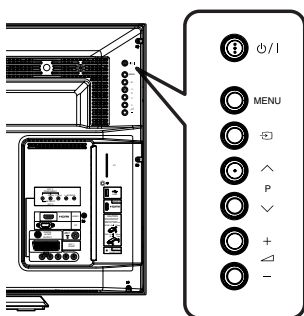
Selecting external video source

Once the connection is done, press  button to display the **Input Source** screen, and then press   button to switch over to the appropriate external source, and press with **OK** button to confirm.



Watching TV

Operation without a remote control



This function is useful when there is no remote control within your reach.

1. Press **MENU** briefly to display the direct control screen.
2. Press **P** ^ v instead of ^ v, or press **Δ** + / - instead of < >, to select the menu option.
3. Press **MENU** to confirm the selection.

NOTE

- The direct control menu screen will disappear if left unattended for several seconds.

EPG (Electronic Programme Guide)

EPG is an on-screen guide that displays scheduled digital TV programmes. This guide is not available with analogue channels. You can navigate, select and view programmes.

With the EPG menu you can:

- View a list of currently broadcast digital programmes.
- View upcoming programmes.

Switch on EPG

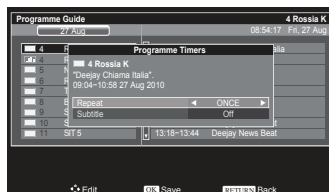
NOTE

- The first time you use EPG, you may be prompted to perform an update. If so, follow the on-screen instructions.
1. Press **EPG** on the remote control, the EPG will appear and the detailed information about the current programme is displayed.



● TIMER MENU

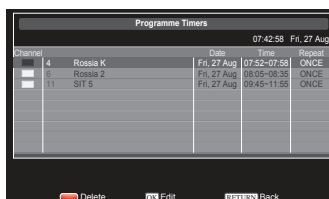
1. Press < > to select desired date, and press **OK**.
2. Press ^ v to select desired channel, and press < >.
3. Press ^ v to select programme, and press **OK**.



4. Press ^ v to select Repeat or Subtitle, and then press < > to adjust the setting as required.
5. Press **OK** to save.

● TIMER LIST

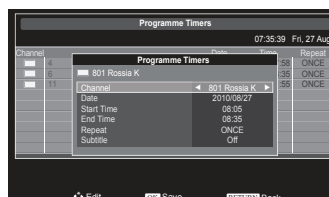
1. Press **Blue** button on the remote control to enter the Timer List menu.



2. Press ^ v to select desired programme and press **OK** to edit.

NOTE

- Press **Red** button on the remote control to delete the timer.
3. Press ^ v to select Channel, Date, Start Time, End Time, Repeat or Subtitle and press < > to adjust the settings as required.



4. Press **OK** to save the settings.




Watching TV

Teletext

What is Teletext?

Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your TV receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather and sports information, stock exchange prices and programme previews are among the many services available.








Turning on and off Teletext

1. Select a TV channel or external source providing a Teletext programme.
2. Press  to display Teletext.
 - Many stations use the TOP operating system, while some use FLOF (e.g. CNN). Your TV supports both these systems. The pages are divided into topic groups and topics.
 - If you select a programme with no Teletext signal, Teletext will not be displayed.
 - The same message displays during other modes if no Teletext signal is available.
3. Press  again to display Teletext with TV picture.
4. Press  again to deactivate Teletext.

NOTE


- Teletext will not work if the selected signal type is RGB.

Buttons for teletext operations

Buttons	Description
P (^ / v)	Increase or decrease the page number.
Colour (R/G/Y/B)	Select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding Colour (R/G/Y/B) on the remote control unit.
0 - 9	Directly select any page from 100 to 899 by using 0 - 9 .
 (Top/Bottom/Full)	Switch the Teletext image to Top, Bottom or Full.
 (INDEX)	Press this button to return to page 100 or index page.
 (HOLD)	Stop updating Teletext pages automatically or release the hold mode.
 (REVEAL)	Reveal or hide hidden information such as an answer to a quiz.
 (SUBTITLE)	Display the subtitle or exit the subtitle screen. <ul style="list-style-type: none"> • Subtitles will not be displayed when the service does not contain subtitle information.
 (EX)	Cancel the Teletext display.
 (C)	Display or exit the time screen.

Using the MHEG5 application (UK only)

Some services bring you programmes with the MHEG (Multimedia and Hypermedia Expert Group) application encoded, letting you experience DTV interactively.

When provided, the MHEG5 application will start when you press the  button.

MHEG5 screen sample



Channel Setting

Auto Tuning

Auto Tuning

The TV automatically detects and stores all available services in your area. This function also allows you to perform the channel setting for digital and analogue individually and reconfigure the settings after the initial auto installation has been completed.

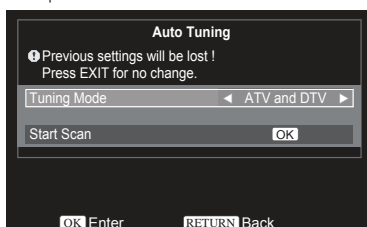
Press **MENU**.

Press <> to select Setup, and press **OK**.

Press ^v to select Auto Tuning, and press **OK**.

● Tuner Mode - Antenna

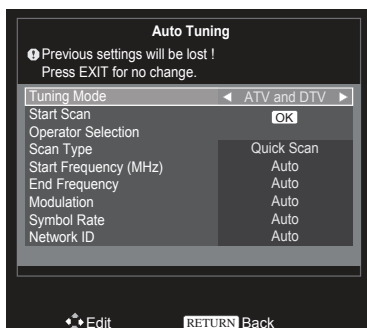
1. Press <> to select ATV and DTV, DTV or ATV, and press **OK**.



2. When country was selected "Others" and ATV system was selected, press ^v to select System, and press <> to select system.
3. Press ^v to select Start Scan, and press **OK** to start auto tuning.
4. If you are able to receive broadcasts from more than one region or transmitter you will be prompted to choose via an OSD menu.

● Tuner Mode - Cable

1. Press <> to select ATV and DTV, DTV or ATV, and press **OK**.



2. Press ^v to select Operator Selection, and press <> to select Operator Selection.

NOTE

- You may be prompted to select your local cable operator before running the cable scan mode.
3. Press ^v to select Scan type, and press <> to select Quick Scan or Full Scan.
 4. Press ^v to select Start Frequency, End Frequency, Modulation, Symbol Rate or Network ID, and use digit buttons on the remote control to define the information or select Auto for tuning.
 5. When country was selected "Others" and ATV system was selected, press ^v to select System, and press <> to select System.
 6. Press ^v to select Start Scan, and press **OK** to start auto tuning.

NOTE

- The information should be given by your cable provider.
- Network ID is only available for Quick Scan.

Manual tuning

There are two TV modes: ATV and DTV that can be tuned-in manually using Manual Tuning.

ATV Manual Tuning

Press **MENU**.

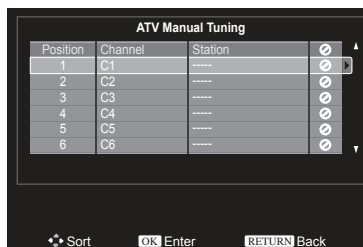
Press <> to select Setup, and press **OK**.

Press ^v to select ATV Manual Tuning, and press **OK**.

● Channel Sort

Channel Sort allows you to reorder the channels.

1. Press ^v to select desired channel and press >.



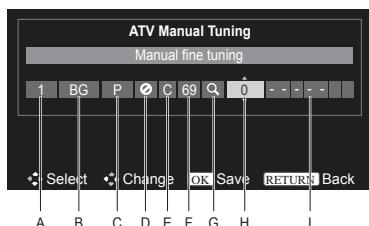
2. Press ^v to select the channel you wish to swap and press <. The positions of the two channels are swapped.

Channel Setting

● Channel Edit

Channel Edit allows you to change the channel number or the channel name.

1. Press $\wedge \vee$ to select desired channel and press **OK**.
2. Press $\< \>$ to select an item, then press $\wedge \vee$ to change the data, and then press **OK**.



- A** Position:
The number to be pressed on the remote control.
- B** System:
Specific to certain areas.
- C** Colour system:
Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.
- D** Skip:
0 Means nothing has been stored or the facility to skip the channel is On.
- E** Signal Class:
The channel classification.
- F** Channel:
The channel number on which a station is being broadcast.
- G** Searching:
Search up and down for a signal.
- H** Manual fine tuning:
Turn on to execute fine tune function.
Turn off to execute manual fine tune function.
- I** Station:
Station identification. Use the $\wedge \vee \< \>$ buttons to enter up to seven characters.
3. Press **OK** to save.

DTV Manual Tuning

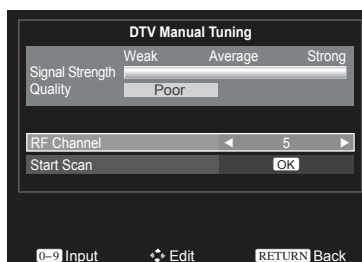
Press **MENU**.

Press $\< \>$ to select Setup, and press **OK**.

Press $\wedge \vee$ to select DTV Manual Tuning, and press **OK**.

● DTV mode - Antenna

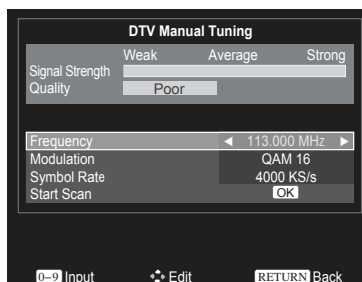
1. Press $\wedge \vee$ to select RF Channel and press $\< \>$ to select or use the digit buttons on the remote to enter a channel.



2. Press $\wedge \vee$ to select Start Scan and press **OK** to start tuning.

● DTV mode - Cable

1. Press $\wedge \vee$ to select Frequency, Modulation or Symbol Rate, and use the digit buttons on the remote to define the information or select Auto for tuning.



2. Press $\wedge \vee$ to select Start Scan and press **OK** to start tuning.

DTV Settings

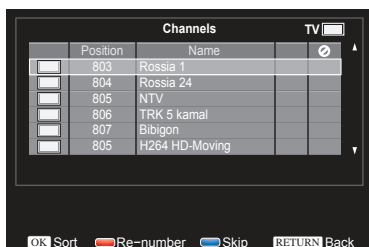
DTV Settings

Press **MENU**.

Press **<>** to select Setup, and press **OK**.

Press **^v** to select DTV Settings, and press **OK**.

Channels



● Re-number

1. Press the **Red** button on the remote to renumber the highlighted channel.
2. Edit the channel number using the digit buttons on the remote and press **OK**.

● Skip Channels

Channel Skip allows you to skip one or more channels when pressing **P ^v** on the remote to switch between channels.

1. Press the **Blue** button on the remote.
A **⊗** icon appears.

● Channel Sort

Channel sort allows you to reorder the channels.

1. Press **^v** to select desired channel and press **OK**. A tick icon appears.
2. Press **^v** to select the channel you wish to swap and press **OK**.
The positions of the two channels are swapped.

Channel Options

● Skip Channels

1. Press **<>** to highlight the skip (**⊗**) box.
2. Press **OK**. A tick appears in the box.

● Parental Control

Lock TV channels to prevent children from watching certain channels.

1. Press **<>** to highlight the lock (**⊗**) box.
2. Press **OK**. A tick appears in the box.

If you have already set the password, enter it here.
If the password had not been set, see **Password** to set a new password.

NOTE

- To view a locked channel, you must enter a password.
When you select a locked channel, a password prompt message pops up.

Subtitle and Audio

You can enable subtitles for each TV channel. Subtitles are broadcasted via teletext or DVB-T digital broadcasts. With digital broadcasts, you have the additional option of selecting a preferred subtitle language.

● Subtitle Display

Press **<>** to select On to display subtitle always. Select Off to close subtitles.

● Subtitle Type

When watching channels with hearing impaired service, you can enable the subtitle commentary for the hearing handicapped. For digital channels only.
(Normal/Hearing Impaired)

● Digital Subtitle Language or 2nd

Press **<>** to select a desired subtitle language.

NOTE

- If your selected subtitle language is not broadcast, the default language subtitle will be displayed.
- If the 1st Subtitle language you selected is not available, the 2nd Subtitle language will be displayed.

● Audio Type

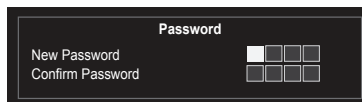
When watching channels with hearing impaired service, you can enable the subtitle commentary for the hearing handicapped. For digital channels only.
(Normal/Hearing Impaired)

● Audio Language or 2nd

Press **<>** to select a desired audio language.

Password

Lock TV channels or connected devices with a four-digit code to prevent children from watching unauthorized content.



Enter your password by using the digit buttons on the remote control.

NOTE

- If you forget your password, enter "1276" to override any existing passwords.

DTV Settings

Parental

Some digital broadcasters rate their programmes according to age.
You can set TV to display only programmes with age ratings higher than your child's.
This function requires a password.

1. Enter your password to access the Parental menu.
2. Press < > to set the age rating from age 4–18 or select None to turn this function off or Block All.

NOTE

- This function is available for programmes with Age Rating information.

Local Time Setting

Set the current time.

Favorite Control

This function will show your favorite programs on the channel list.

Favorite Program

Set your favorite program shown on the channel list.

Favorite Network

When watching the digital TV, select your favourite network in order to allocate channels of your favourite network on the top of channel list.
Select your favourite network and press **OK**.

NOTE

- This menu is available only when 1) "**Norway**" is selected on country setting and 2) more than two networks are found after automatic channel scan.

Channel Grouping

The channel group setting is to group the service type (Video or Audio services) while changing channel by P+/P– buttons.

It is required for RiKS TV certification for Norway.

When Channel Grouping is set to On, the P+/P– will change the services in a group, for example we have the services in channel list like below

1. V1 (video service)
2. V2
3. V3
4. V4
5. V5

6. A1 (audio service)
7. A2
8. A3

If channel is set to On, the P+/P– will change service among V1 to V5 when DTV video is currently selected, the way to change service type to audio is to push DTV/ATV button, DTV/ATV button will be changing source among ATV, DTV video and DTV audio. The channel grouping will be changed to On automatically while country is set to Norway.

Common Interface

Checking the CA module information.

NOTE

- This menu is only available for digital stations.
- The content of this menu depends on the provider of the CA module.

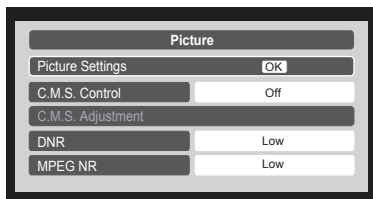
Module: General information on CA module displays.
Menu: Adjustment parameters of each Smartcard displays.
Enquiry: You can input numerical values such as passwords here.

TV Menu

Picture

Press **MENU**.

Press < > to select Picture, and press **OK**.



Picture Settings

You can customise current picture mode settings while selecting "User" in the Picture Settings menu.

Selected item	Description
Smart Picture	Smart picture to set your TV to a predefined picture setting. (Dynamic/ Standard/ Soft/ Movie/ User)
Active Contrast	Automatically adjust the contrast of an image according to the scene. (Off/Low/High)
Back Light	Adjust the background brighter or darker.
Contrast	Change the level of bright parts in the picture keeping the dark parts unchanged.
Brightness	Change the level of light in the picture.
Colour	Change the level of saturation.
Tint	Change the colours to reddish or bluish.
Sharpness	Change the level of sharpness of fine details.
Film Mode	Automatically detects a film-based source, analyses it and then recreates each still film frame for high-definition picture quality. (On, Off)
Colour Temperature	Set the colour temperature to Cool (bluer), Medium (balanced), Warm (redder).
Gamma Adjustment	Selects the tone difference of the brightness and darkness of the image according to the type of programme watched.
Reset	Reset all adjustment item to factory preset values.

C.M.S. Control

Select On to set the C.M.S. Adjustment to be more natural.

C.M.S. Adjustment

Adjust the brightness of a selected colour using a six-colour adjustment system (only if the C.M.S. Control is On).

DNR

Filter and reduce the noise in the picture. (Off/Low/Middle/High)

MPEG NR

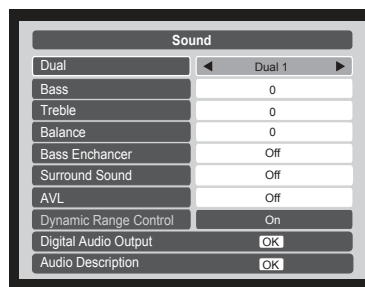
When watching a DVD, the compression may cause some words or picture elements to become distorted or pixelated. Using the MPEG NR feature reduces this effect by smoothing out the edges. (Off/Low/Middle/High)

Sound

Press **MENU**.

Press < > to select Sound, and press **OK**.

Adjust sound setting



Selected item	Description
Dual	If a programme or film is being broadcast with a soundtrack in more than one language, the DUAL feature allows selection between Dual1 or Dual2.
Bass	Adjust the Bass sound.
Treble	Adjust the Treble sound.
Balance	Set the balance of the left and right speakers to best fit your listening position.

TV Menu

Selected item	Description
Bass Enhancer	This function allows you to enjoy bass-enhanced sound.
Surround Sound	Automatically switch the TV to the best surround sound mode available from a broadcast. (On, Off)
AVL (Auto Volume Leveling)	Reduce sudden volume changes, for example, during commercials or when switching from one channel to another. (On, Off)
Dynamic Range Control	Set the control of audio compression for some digital TV programmes. (On, Off) <ul style="list-style-type: none"> MPEG-1 and MPEG-2 audio programmes are not supported.

Digital Audio Output

Selected item	Description
Audio Format	Select the type of digital audio out. (PCM, Auto)
Audio Delay	The audio delay timing to set Auto or Manual for audio/video display timing adjustment.
Audio Delay Time (ms)	When Audio Delay set to Manual, audio delay time to adjust (only if the Audio Delay is Manual).

Audio Description

Selected item	Description
Audio Description	Set the mix of visually impaired audio with regular audio. (On, Off)
Mixing Level	Adjust the volume of visually impaired audio.

Setup

Press **MENU**.
Press < > to select Setup, and press **OK**.

Language

Select the menu display language.

Country

Select the country where you are located.
The TV installs and arranges channels according to your country.

Tuner Mode

Select the tuner mode. (Antenna, Cable)

Auto Tuning

See page **Channel Setting**.

ATV Manual Tuning

See page **Channel Setting**.

DTV Manual Tuning

See page **Channel Setting**.

DTV Settings

See page **DTV Settings**.

Connection Setting

● Lip Sync

This option activates an auto audio/video display timing adjustment function that allows HDMI source devices to accurately perform synchronization automatically. All of the above HDMI settings require a proper HDMI source device. If HDMI source products do not support these functions, the TV may not work properly when activating these functions.

NOTE

- In a non-HDMI signal mode, this function is not available.

TV Menu

● EXT1 Input

You can set the specific type of signal going into SCART terminal. (S-VIDEO, AV)
Check the signal output type of the DVD or other equipment connected to the SCART terminal of the TV, referring to manufacturer's instruction of those devices. Select the correct input signal setting for SCART.

NOTE

- This option is available only when the input source is SCART.

Picture Position

For adjusting a picture's horizontal and vertical position.

Selected item	Description
Horizontal Position	Centres the image by moving it to the left or right.
Vertical Position	Centres the image by moving it up or down.
Reset	Reset all adjustment item to factory preset values.

NOTE

- Adjustments are stored separately for each input source.
- Depending on the input signal type, "Wide Mode" setting or "Movie" for the USB mode, a position setting may not be available.
- This function is not available for digitally sourced content.

Auto Installation

See page Initial Installation Overview.

No Operation Off

When set to "4h,6h,8h", the TV will automatically enter standby mode if no operations are performed in 4/6/8 hours.

This power saving feature can be cancelled by selecting "Off".

Location

Select the location. (Home, Store)

Software Upgrade

● Auto Upgrade

The TV automatically determines whether a new software Searching for updates version is available when the TV is in standby mode.

NOTE

- All countries except UK, Sweden and Italy are set to "Off" for this function.

● Auto Install

Now checks if there is new software immediately.

● Manual OAD

When you get the software updating news from the retailer or internet, you can update the operation software using the OAD (Over Air Download) Download. The updated software data will be transferred through the TV signal.

NOTE

- Please do not switch off the TV during the downloading process.

● USB Upgrade

This function allows you to update to the latest software using a USB device. You must update the software through the USB terminal.

System Information

Display the Software version.

Reset TV

If complex adjustments are made and the settings cannot be restored to normal, you can reset the settings to the factory preset values.

TV Menu

Features

Press **MENU**.

Press < > to select Features, and press **OK**.

EPG (Electronic Programme Guide)

See page **EPG (Electronic Programme Guide)**.

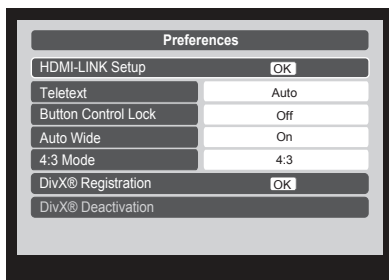
Sleep Timer

Sleep Timer switches the TV to standby after a defined period of time.

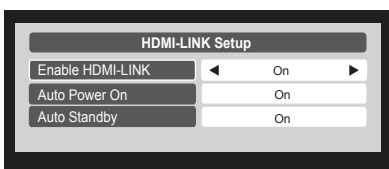
Preferences

Press **MENU**.

Press < > to select Preferences, and press **OK**.



HDMI-LINK Setup



● Enable HDMI-LINK

- Set to "On" to enable the following HDMI-Link function. (On, Off)

● Auto Power On

- When set to "On", powering on or playing from the HDMI-CEC compliant device will automatically turn on the TV from its standby mode and switch the input source to the HDMI port connected with HDMI-CEC compliant device. (On, Off)

● Auto Standby

- When set to "On", turning off the TV will automatically turn off the connected HDMI-CEC compliant device. (On, Off)

Teletext

You can select Teletext language when the TV receives Teletext signal broadcast by a TV network. (Auto, LIST)

- See page **Teletext**.

Button Control Lock

Locks the buttons on the TV except the power switch. (Off)

Auto Wide

When this television receives a true Wide screen picture and Auto format is On, it will automatically be displayed in Wide screen format, irrespective of the television's previous setting. (On, Off)

4:3 Mode

Select aspect ratio behavior for Auto mode. When 4:3 is selected, the picture size will follow WSS or Scart Pin8 Spec. If 16:9 is selected, the picture format will change to wide screen. (4:3, 16:9)

DivX®

This is the function to confirm your registration code. You need to register the code at www.divx.com.

- Press **MENU**.
- Press < > to select "Preferences", and press **OK**.
- Press ^ v < > to select "DivX® Registration" or "DivX® Deactivation", and press **OK**.

DivX® Registration

You can find your registration code on this menu. You need to register the TV at www.divx.com before playing the DivX® content.

DivX® Deactivation

You can find your deactivation code on this menu. You need to deactivate the TV at www.divx.com to release the registration.

TV Menu

Wide Mode

You can manually select the size of a picture appeared on your screen.

Selectable picture size varies with the type of signal received.

Press **[F4]** while the Wide Mode menu displays on the screen.

- As you toggle down the options, each mode is immediately reflected on the TV.

Selected item	Description
Full	For 16:9 squeeze pictures.
4:3	For 4:3 "standard" pictures. A side bar appears on each side.
Panorama	In this mode the picture is progressively stretched toward each side of the screen.
Zoom	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Subtitle	When subtitle are included on a letterbox format broadcast, this setting will raise the picture to ensure that all the text is displayed.
14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Normal	When using a PC connected via HDMI, this setting will show the picture without over scan, i.e. WYSIWYG. This option is only available when watching video signal source via HDMI.
Dot by Dot	Display an image with the same number of pixels on the screen (only when receiving 1080i / 1080p signal).

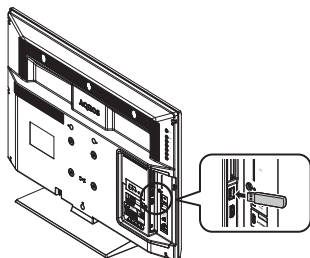
NOTE

- Some picture sizes may not be displayable depending on the input signal.

Connecting a USB device

USB function

This TV is equipped with a USB1.1 and USB2.0 compatible connector that enables you to view photos, listen to music, and play videos stored on a USB storage device.

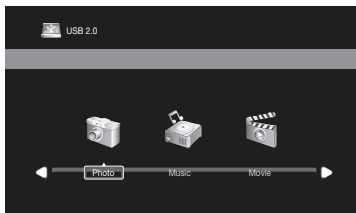


NOTE

- Depending on the USB device, the TV may not be able to recognise the contained data.
- Use only alphanumeric characters for naming files.
- File names over 80 characters (may vary depending on character set) may not be displayed.
- Do not disconnect a USB device or memory card from the TV while transferring files, using the slide show function, when a screen is switching to another or before you exit "USB" from the "Input Source" menu.
- Do not connect and disconnect a USB device from the TV repeatedly.
- Sharp recommend that you back up your files before making any connections to the TV set in order to avoid any possible data loss. Sharp will not be held responsible for any file damage or data loss.

Basic Operation

- Turn on the TV.
- Connect the USB storage device to the USB port on the side of your TV.
- Press on the remote control and press $\wedge \vee$ to select **USB** input source and press **OK**. The USB menu appears.



- Press $\langle \rangle$ to select **Photo**, **Music** or **Movie** and press **OK**. The USB thumbnail browser appears.

- Press $\wedge \vee \langle \rangle$ and **OK** to browse the files or folders. Press **EXIT** to return to the previous operation / folder.

View Photos

- In the **Photo** thumbnail browser, press $\wedge \vee \langle \rangle$ to select a photo or a photo album.



- Press **OK** to view the image. The slide show begins.
- Use the on the remote to display control panel for Photo mode operation.

Listen to Music

- In the **Music** thumbnail browser, press $\wedge \vee \langle \rangle$ to select a music file or a music album.
- Press **OK** to play the MP3 file.
- Use the **MENU** or on the remote to display control panel for Music mode operation.

Play Movie

- In the **Movie** thumbnail browser, press $\wedge \vee \langle \rangle$ to select a movie file.
- Press **OK** to play the movie.
- Use the **MENU** or on the remote to display control panel for Movie mode operation.

Connecting a USB device

USB device compatibility

USB 2.0 device	USB Memory (Mass Storage class)
File system	FAT / FAT32
Photo file format	JPEG (*.jpg), PNG, bmp
Music file format	MPEG1 (*.MP3) Bitrate: 32k, 64k, 96k, 128k, 196k, 256k, 320kbps Sampling frequency: 32k, 44.1k, 48kHz WMA (*.WMA, *.ASF) Bitrate: 128k, 196k, 256k, 320kbps Sampling frequency: 8k, 16k, 32k, 44.1k, 48kHz
Video file format	MPEG1/2 (*.AVI, *.MPG, *.MPEG, *.TS) MPEG4 (*.AVI, *.MP4, *.MKV) H.264 (*.AVI, *.MP4, *.MKV, *.TS) DivX (*.AVI) XviD (*.AVI)

NOTE

- Progressive format jpeg files are not supported.
- All files in a USB device with capacity may not be played properly.
- Operation using USB hubs is not guaranteed.
- Cables used to extend the USB device must be certified as USB 2.0.
- Video playback via a USB device may not be possible or the playback quality affected if the device data transfer speed rating is too low.
- No quickly operation between play / pause / fast forward / rewind.
- The video might get judder or unsmooth when USB read/write speed is under requirement (some Full HD format).
- Files in USB 1.1 devices may not be played properly.
- Some video file formats may not be played depending on the file.

Connecting a USB device

Control panel for photo/music/movie mode operations

Icon	Description	Photo	Music	Movie
	Play/Pause.	✓	✓	✓
	Rewind. Each time you press rewind, the speed will change (2x, 4x, 8x, 16x).	–	✓	✓
	Fast-forward. Each time you press fast-forward, the speed will change (2x, 4x, 8x, 16x).	–	✓	✓
	Play the previous file.	✓	✓	✓
	Play the next file.	✓	✓	✓
	Play the slide show On or Off.	✓	–	–
	Stop playback and return to the list of files.	✓	✓	✓
	Repeat mode - Off: Repeat off - One: Repeat selected file once - Folder: Repeat all files in the selected folder	✓	✓	✓
	Repeat from A to B Set A: to set starting point Set B: to set end of playback Note: to cancel the repeat	–	–	✓
	Show playlists. Select a file from the playlists to start playback.	✓	✓	✓
	The information will be removed by time-out (about 15 sec) or press OK to exit.	✓	✓	✓
	Slow-forward. Each time you press slow-forward, the speed will change.	–	–	✓
	Single frame-forward. Each time you press OK , the picture will change to the next still picture.	–	–	✓
	Aspect Ratio.	–	–	✓
	Smart Picture.	–	–	✓
	Rotate clockwise 90°.	✓	–	–
	Rotate counterclockwise 90°.	✓	–	–
	Select photo display interval.	✓	–	–
	Background music.	✓	–	–
	Goto Time Use the digit button on the remote control to enter search time, and press OK .	✓	–	–

NOTE

- Files in folder which are not related to a selected mode cannot be accessed.
- "Unsupported File" alert will pop up for a selected file of invalid format.

Connecting external devices

● Before connecting ...

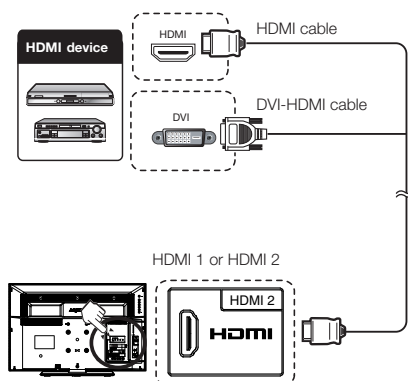
- Be sure to turn off the TV and any devices before making any connections.
- Firmly connect a cable to a terminal or terminals.
- Carefully read the operation manual of each external device for possible connection types. This also helps you get the best possible audiovisual quality to maximise the potential of the TV and the connected device.

HDMI connection

Example of connectable devices

- DVD ● Blu-ray player/recorder

The HDMI connections (High Definition Multimedia Interface) permit digital video and audio transmission via a connection cable from a player/recorder. The digital picture and sound data are transmitted without data compression and therefore lose none of their quality. Analogue/digital conversion is no longer necessary in the connected devices, which also would result in quality losses.



DVI/HDMI conversion

- Using a DVI/HDMI adapter cable, the digital video signals of a DVD can also be played via the compatible HDMI connection.
- Both HDMI and DVI use the same HDCP copy protection method.
- Audio reproduction is not supported by this connection method, external audio equipment is required.

Supported video signal

- 576p, 480p, 1080i, 720p, 1080p. See page 26 for PC signal compatibility.

One touch play

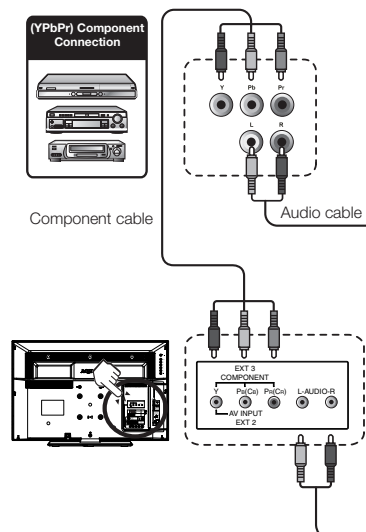
- When pressing play or inserting a disc on an external device, the TV will turn on from standby and playback the image from the HDMI source. (See page 19 for HDMI-LINK Setup.)

YPbPr (Component connection)

Example of connectable devices

- VCR ● DVD ● Blu-ray player/recorder

You will enjoy accurate colour reproduction and high quality images through the (YPbPr) when connecting a DVD recorder or other recording equipment.



Connecting external devices

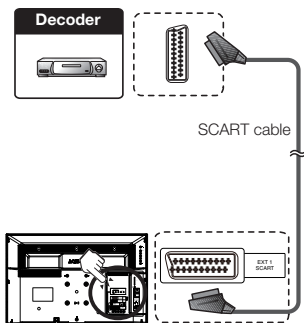
SCART connection

Example of connectable devices

- Decoder

● When using the SCART

Full SCART, which transmits S-Video, RGB and CVBS in, and CVBS tuner out.

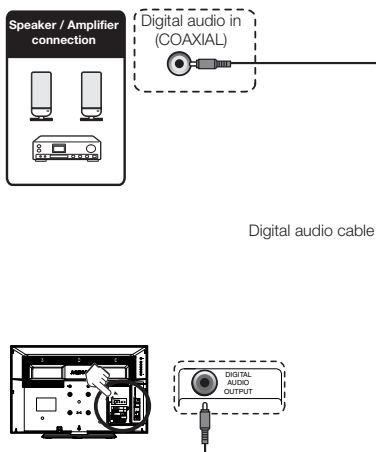


NOTE

- In cases when the decoder needs to receive a signal from the TV, make sure to select the appropriate input source.

Speaker / Amplifier connection

● Connecting an amplifier with digital audio input



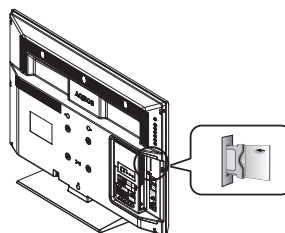
Inserting the Smartcard into CA module

In order to receive coded digital stations, a Conditional Access module (CA module) and a Smartcard must be inserted into the CI (Common Interface) slot of the TV.

The CA module and the Smartcard are not supplied accessories. They are usually available from your dealer.

Inserting the Smartcard into the CA module

1. Carefully insert the CA module into the CI slot with the contact-side forward.
2. The logo on the CA module must be facing outward from the rear of the TV.



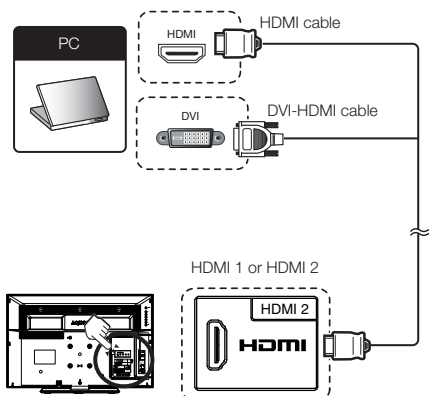
NOTE

- It takes about 30 seconds to certify the license key when you insert a Smartcard into the CI+ compatible CA module for the first time. This process may fail when there is no antenna input or you have never run "Auto installation".
- The CI+ compatible CA module sometimes upgrades its firmware. You may not receive any TV images before upgrading. You can only use the power button during upgrading.
- The CI+ compatible CA module does not allow you to output any copy protected programmes using monitor out.
- If the TV displays an update confirmation message for the Smartcard while receiving CI+ compatible broadcasts, follow the screen prompts.
- Make sure that the CA module is properly inserted.

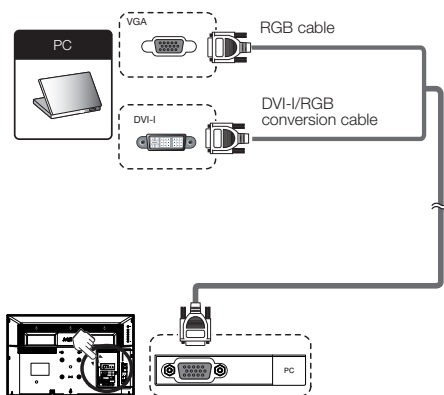
Connecting external devices

Connecting a PC

Digital connection



Analogue connection



Supported display resolutions

Computer formats (PC)

Resolution	Refresh rate
640 x 480	60Hz
800 x 600	56Hz
800 x 600	60Hz
1024 x 768	60Hz
1280 x 720	60Hz
1280 x 768	60Hz
1360 x 768	60Hz
1280 x 1024	60Hz

Video formats

Resolution	Refresh rate
480i	60Hz
480p	60Hz
576i	50Hz
576p	50Hz
720p	50Hz, 60Hz
1080i	50Hz, 60Hz
1080p	(HDMI only) 50Hz, 60Hz, 24Hz

NOTE

- PC Audio is not supported when using the Analogue or DVI connection, external audio equipment is required.

Troubleshooting

Problem	Possible Solution
No picture	<ol style="list-style-type: none"> 1. Connect power cord correctly. 2. Turn on power. 3. Connect signal cable correctly. 4. Press any button on the LCD TV.
Abnormal colours	Connect signal cable correctly.
Twisted picture	<ol style="list-style-type: none"> 1. Connect signal cable correctly. 2. Please use compatible signal.
Picture too dark	Adjust brightness and contrast.
Audio only, no images	<ol style="list-style-type: none"> 1. Please check if input signal is connected correctly. 2. TV-RF signal must not be lower than 50dB.
Picture only, no audio	<ol style="list-style-type: none"> 1. Connect signal cable correctly. 2. Adjust volume to proper level. 3. Connect audio signal cable correctly. 4. TV-RF signal must not be lower than 50dB.
Cannot use remote control	<ol style="list-style-type: none"> 1. Please change battery. 2. Turn off power for 10 seconds; and then restart power.
Cannot receive sufficient channels through antenna	Please use the Channel Scan function to increase the number of channels not included in memory.
No colour	Please adjust the colour setup.
Blinking picture accompanied by ghost image	<ol style="list-style-type: none"> 1. Check the connection of antenna/signal cable. 2. Check if channel is in play mode. 3. Press signal source and change input mode.
Broken lines or segments	<p>Adjust antenna.</p> <p>Keep the TV away from noise sources, such as automobiles, neon lights, and hair dryers.</p>
Certain TV channels are blocked (Hope to acquire some channels)	Please use the Update Scan method to add the channels not included in memory.
Overlapping images or ghost images	<p>Please use multi-directional outdoor antenna.</p> <p>(If your TV is subject to the influence of nearby mountains or buildings).</p>
Cannot use a function	If the item you choose turns gray, that item cannot be selected.
Cannot receive programmes	Please use the Update Scan method to add the channels not included in memory.

Appendix

Specification

Item			32" LCD COLOUR TV Model: LC-32LE144E	32" LCD COLOUR TV Model: LC-32LE244E
LCD screen size			32" diagonal	
Number of dots			3,147,264 dots (1366 x 768 x 3 dots)	6,220,800 dots (1920 x 1080 x 3 dots)
Video Colour System			PAL/SECAM/NTSC 4.43	
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L/L')	
		Digital	DVB-T, DVB-C	
	Receiving Channel	VHF/UHF	ATV: IRA-E69, DVB-T: E5-E69	
		CATV	S-band, S1-S41ch	
	TV-Tuning System		Auto Preset 1599 ch, Auto Label, Auto Sort	
	Stereo/Bilingual		NICAM/A2	
Audio amplifier			5 W x 2	
Speaker			33 x 140 x 36 mm	
Rear	ANTENNA		UHF/VHF 75 Ω	
	SCART		SCART (CVBS input, Y/C input, RGB input, TV output)	
	PC IN		D-sub 15 pin (AV input)	
	CVBS/COMPONENT		CVBS (EXT2)/Y(EXT3)/Pb(Cb)/Pr(Cr), RCA pin (L/R)	
	SPDIF OUT		Digital audio output	
	HDMI 1		Digital video and audio input	
Side	C. I. (Common Interface)		EN50221, R206001, CI Plus specification	
	USB		Software update, multi-media play (DC5V / 500 mA)	
	HDMI 2		Digital video and audio input	
	HEADPHONE		Ø 3.5mm jack (Audio output)	
OSD Language			English, German, French, Italian, Dutch, Spanish, Greek, Portuguese, Swedish, Finnish, Russian, Polish, Turkish, Hungarian, Czech, Slovak, Danish, Norwegian, Estonian, Latvian, Lithuanian, Slovenian, Bulgarian, Croatian, Romanian, Serbian, Ukrainian, Belarussian.	
Power Requirement			AC 220-240 V, 50 Hz	
Power Consumption			58 W (according to EN60065) 0.15 W (Standby mode)	
Weight			7.6 kg (Without stand), 8.6 kg (With stand)	
Operating temperature			0°C to +40°C	

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

NOTE

- Refer to the inside back cover for dimensional drawings.
- Audio cannot be output through the HDMI terminal.

Environmental specifications

Item	
*1 On-Mode (W)	38W
*2 Standby-Mode (W)	0.15W
*3 Annual Energy Consumption (kWh)	55kWh

*1 Measured according to EN62087 : 2009.

*2 Measured according to EN62301 : 2005.

*3 Annual energy consumption is calculated on the basis of the On-Mode (Standard) power consumption, watching TV 4 hours a day, 365 days a year.

NOTE

- The power consumption of On-Mode varies depending on the images the TV displays.

Other information

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
- Storage temperature: -20°C to +60°C.

Devices connected to the protective earthing of the building installation through the MAINS connection or through other devices with a connection to protective earthing and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation within a certain frequency range (galvanic isolator, see EN 60728-11).

NOTE

- For requirements in **Norway** and **Sweden**, the requirements for isolation are also relevant for devices that can be connected to television distribution systems.

Appendix

Trademarks

- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- The “HD TV” Logo is a trademark of DIGITALEUROPE.
- The “HD TV 1080p” Logo is a trademark of DIGITALEUROPE.
- The DVB logo is the registered trademark of the Digital Video Broadcasting - DVB - project.
- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.
- ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.
- ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

**Attention:**

Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.

*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For **Switzerland**: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For **Spain**: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.



Pb

The battery supplied with this product contains traces of Lead.

For **EU**: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

Please contact your local authority for details on the collection and recycling schemes.

For **Switzerland**: The used battery is to be returned to the selling point.

For other **non-EU countries**: Please contact your local authority for correct method of disposal of the used battery.